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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,447	01/06/2004	Tadafumi Shimizu	2003-1928A	2593

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EXAMINER	
WOLLSCHLAGER, JEFFREY MICHAEL	
ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/751,447	SHIMIZU ET AL.	
	Examiner	Art Unit	
	Jeff Wollschlager	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *5-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/09/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-4 in the reply filed on February 27, 2006 is acknowledged. Claims 5-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5-7 of copending Application No. 11/299,092 (priority date of June 28, 2001). Although the conflicting claims are not identical, they are not patentably distinct from each other because removing the unevenness of the supporting layer by polishing the supporting layer and employing a heat-resistant synthetic resin for the supporting layer are obvious variants of claims 5-7 in the context of application 11/299,092.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (Japanese Patent Application Publication 2002-202675; published July 19, 2002; filed December 28, 2000).

Claim 1 is directed to a method for producing a belt for an image forming apparatus comprising a) applying a release layer containing flouropolymers on a die surface of a shaping die and baking the release layer, b) applying an elastic layer over a surface of the release layer, where the surface of the release layer is opposite the die surface as viewed from the release layer, and baking the elastic layer, c) applying a supporting layer containing heat-resistant synthetic resin over a surface of the elastic layer, where the surface of the elastic layer is opposite the die surface as viewed from the elastic layer, and baking the supporting layer, d) removing the unevenness of the supporting layer, and e) releasing the combined layers from the die surface.

Yoshida et al. teach steps a), b), c), and e) in the method of claim 1 (Abstract, paragraphs [0019] and [0020]), but do not teach step d) removing the unevenness of the support layer. However, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the claimed invention to remove the unevenness of the surface of the supporting layer, as required, because it is well known in the art that

smooth surfaces are beneficial in the attempt to achieve desired results. For example, a smoother layer will increase the contact area of the belt with the roller, reducing belt slippage, and in turn yielding a more consistent result.

As to claim 3, Yoshida et al. do not teach turning the belt inside out. However, it would have been *prima facie* obvious to one of ordinary skill in the art to turn the belt inside out or to mold the belt on either an inside or outside surface of a cylindrical mold.

As to claim 4, Yoshida et al. teach that the belt is a fixing belt (Abstract)

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (Japanese Patent Application Publication 2002-202675; published July 19, 2002; filed December 28, 2000) in view of Uehara et al. (U.S. Patent 5,345,300; issued September 6, 1994;)

Yoshida et al. teach the applicant's claimed invention in claim 1. See the 103(a) rejection above. However, Yoshida et al. do not teach polishing to remove the unevenness of the surface of the belt. However, Uehara et al. teach an analogous method of forming a laminated polytetrafluoroethylene, polyimide and silicone rubber belt where part of the method comprises polishing the surface of the belt after the belt has been formed (col. 6, lines 44-50). Therefore, it would have been *prima facie* obvious to one of ordinary skill at the time of the claimed invention to modify the method taught by Yoshida et al. with the polishing method taught by Uehara et al. because one of ordinary skill would recognize that a smooth belt surface would be beneficial towards achieving the desired results by helping to extend belt life through the elimination of burrs in the belt, increasing the contact area of the belt with the roller, reducing belt

slippage and yielding a more consistent, higher quality, product. As such the invention as a whole is rejected over the combined teaching of the prior art.

Conclusion

All claims are rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,183,869 to Okuda et al.

U.S. Patent 5,695,878 to Badesha et al.

U.S. Patent Application Publication 2004/0040739 by Yoshimura et al.

U.S. Patent Application Publication 2004/0166270 by Yoshida et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JW

Jeff Wollschlager
Examiner
Art Unit 1732

March 29, 2006

MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER